

### **Remarks**

The applicants discovered that pressure sensitive adhesives that include high levels of silicate tackifying resins (e.g., greater than about 50 wt.%), when dried, have a tendency to lose tack due to the tackifier migrating to the liner interface. This occurs, for example, in solvent borne silicone-based pressure sensitive adhesives, and, in particular, in thicker coatings. To address this issue, the applicants utilize a processing aid, such as a plasticizer, to help the tackifier remain more homogenously distributed and prevent a coated surface from losing tack. New dependent claims 42-45 are introduced to characterize the processing aid or plasticizer as one that provides the pressure sensitive adhesive with an increase in tack of at least 10% compared with an otherwise identical composition but not containing the processing aid or plasticizer. This feature is described by the specification at page 15, lines 13-15.

The outstanding office action includes three prior art-based rejections. Claims 1-8, 10-18, 32, 33, 36, 40, and 41 stand rejected under 35 U.S.C. 103(a) over U.S. Patent No. 6,107,222 (*Joseph et al.*). Claims 1-3, 7-23, and 27-41 stand rejected under 35 U.S.C. 103(a) over International Publication No. WO 96/34028 (*Sherman et al.*). Claims 24-26 stand rejected under 35 U.S.C. 103(a) over *Sherman et al.* and *Joseph et al.* These rejections are traversed.

#### **Rejection over *Joseph et al.***

*Joseph et al.* describe repositionable sheets having a backing and a layer of a nonwoven web thereon. The nonwoven web is prepared from pressure sensitive adhesive fibers, which can be multilayer fibers, that include pressure-sensitive adhesive composition as a structural component of the fibers. See *Joseph et al.* at column 1, lines 43-50. The nonwoven web is illustrated by *Joseph et al.* in Figures 1 and 2 and is described at column 3, lines 24-48.

*Joseph et al.* describe forming the nonwoven web of fibers by melt processes such as spun bonding and melt-blowing. See *Joseph et al.* at column 3, line 66 through column 4, line 11. In contrast to *Joseph et al.*, the present invention is directed at an organic solvent-based pressure sensitive adhesive. It is submitted that one having ordinary skill in the art would not look to the teachings of *Joseph et al.* of forming a nonwoven web of fibers by spun bonding or

melt-blowing to provide an organic solvent-based pressure sensitive adhesive having a generally uniform distribution of tackifying resin and copolymer.

It appears that the outstanding office action contends that the disclosure by *Joseph et al.* of a plasticizer at column 14, lines 13-24, means that the tackifying resin and the copolymer are "generally uniformly distributed" as required by the claimed invention. It is submitted that this is not the case. The disclosure by *Joseph et al.* of plasticizers at column 14, lines 12-24, is a disclosure of optional additives. The term "plasticizers" is used generically by *Joseph et al.* It is submitted that *Joseph et al.* fail to suggest a plasticizer that provides a pressure sensitive adhesive wherein the tackifying resin and the copolymer are generally uniformly distributed. In contrast, the presently claimed invention requires that the silicone tackifying resin and the polydiorganosiloxane polyurea copolymer are "generally uniformly distributed." According to the specification at page 14, lines 5-25, it is the applicants' discovery that generally uniform distribution of the silicone tackifying resin and the polydiorganosiloxane polyurea copolymer can be provided as a result of the use of a processing aid such as a plasticizer. Furthermore, the applicants discovered that by providing a generally uniform distribution of the silicone tackifying resin and the polydiorganosiloxane polyurea copolymer, it is possible to improve the balance of tack, peel, and shear holding power.

It is pointed out that the outstanding office action recognizes that *Joseph et al.* are directed at water-based systems. Claim 1 is amended to more clearly reflect that the solvent-based pressure sensitive adhesive is an "organic" solvent-based pressure sensitive adhesive. Clearly, *Joseph et al.* are not directed at an organic solvent-based pressure sensitive adhesive that provides a generally uniform distribution of tackifying resin and copolymer.

It is submitted that *Joseph et al.* are directed at water-based pressure sensitive adhesives which are different from the pressure sensitive adhesives according to the claimed invention. Furthermore, it is pointed out that *Joseph et al.* are not directed at the concerns of providing generally uniform distribution of tackifying resin and copolymer to provide a balance of tack, peel, and shear holding power as provided by the claimed invention. Furthermore, it is pointed out that *Joseph et al.* are directed at forming nonwoven webs of fibers by spun bonding and melt-blowing processes.

In view of the above comments, it is submitted that one having ordinary skill in the art would not have received a suggestion to modify *Joseph et al.* to achieve the presently claimed invention. Accordingly, withdrawal of the prior art-based rejection over *Joseph et al.* is requested.

#### **Rejection over *Sherman et al.***

*Sherman et al.* describe a tackified crosslinkable polydiorganosiloxane oligourethane segmented copolymer useful as pressure-sensitive adhesives. See *Sherman et al.* at page 1, lines 4-7. The pressure sensitive adhesive composition described by *Sherman et al.* is intended to be curable under free radical or moisture cure conditions. See *Sherman et al.* at page 8, lines 9-19.

The outstanding office action refers to *Sherman et al.* at page 9, lines 21-23, for the disclosure of "plasticizers." It is pointed out that this disclosure of plasticizers is a generic disclosure and is accompanied by a list of other optional components. *Sherman et al.* fail to provide a disclosure of the use of a plasticizer for providing a generally uniform distribution between a tackifying resin and a copolymer according to the claimed invention. As described by the specification at page 14, lines 4-25, a processing aid such as a plasticizer is beneficial to insure generally uniform distribution of the polydiorganosiloxane polyurethane copolymer and the silicone tackifying resin throughout the thickness of the adhesive layer. It is submitted that this teaching is not provided by *Sherman et al.* Accordingly, it is submitted that one having ordinary skill in the art would not have received the suggestion from *Sherman et al.* to use a plasticizer in a manner that provides a generally uniform distribution of tackifying resin and copolymer as required by the presently claimed invention.

In view of the above comments, it is submitted that one having ordinary skill in the art would not have received the suggestion to modify *Sherman et al.* to include a plasticizer in a manner that provides a generally uniform distribution of tackifying resin and copolymer as required by the claimed invention. Accordingly, withdrawal of the rejection over *Sherman et al.* is requested.

**The Rejection over *Sherman et al.* and *Joseph et al.***

Claims 24-26 characterize the processing aid. It is not understood why the outstanding office action relies upon the combination of *Sherman et al.* and *Joseph et al.* As the outstanding office action recognizes, *Joseph et al.* is directed at water-based compositions. It is not clear why one would look to such a disclosure to select a plasticizer that results in a generally uniform distribution of tackifying resin and copolymer as provided by the claimed invention.

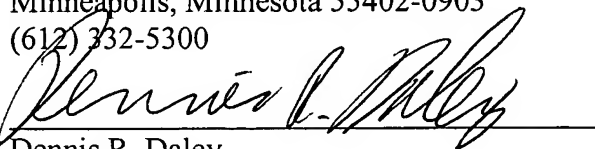
It is further pointed out that new claims 42-45 are introduced to characterize the plasticizer as one selected to provide the pressure sensitive adhesive with an improvement in tack of at least 10% compared with an otherwise identical pressure sensitive adhesive but not containing the plasticizer. This selection of plasticizer is described by the specification at page 15, lines 5-15. It is submitted that *Joseph et al.* and *Sherman et al.* fail to recognize or appreciate that the selection of plasticizer can be made in a manner to provide an improvement in tack of at least 10%.

In view of the above comments, it is submitted that the claimed invention would not have been obvious from *Joseph et al.*, *Sherman et al.*, or a combination of *Sherman et al.* and *Joseph et al.* Accordingly, withdrawal of the three prior art-based rejections is requested.

It is believed that this application is in condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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